

rods, than to the ovipositor of an *alcon* subsp? from the meadow (Fig. 3). The sides of the *alcon* subsp? ovipositor are less heart-shaped and the supporting rods have an elbow and no swelling at the ends.

The specimen is probably an aberrant female *arion*, as suggested by the structure of the ovipositor, but it is not impossible that *arion* and *alcon* which fly together and have the same chromosome number ( $n = 23$ ; Higgins, 1975) can hybridise.

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### Notable ant (Hymenoptera: Formicidae) records from Glen Strathfarrar, East Inverness

Glen Strathfarrar National Nature Reserve (2189 hectares) occupies the lower part of Glen Strathfarrar, East Inverness (VC 96). The heavily glaciated valley has steep slopes where relatively extensive tracts of Caledonian pine forest and birch woodlands have survived. In the valley bottom, the tree cover, in combination with free draining fluvio-glacial deposits, have created ideal conditions for a number of ant species.

Mixed nests of *Formica lemani* Bondroit and *F. sanguinea* Latreille were seen in many areas where there was sandy and stony ground adjacent to trees. Glen Strathfarrar provides the beginnings of the link between the populations of *F. sanguinea* to the north at Migdale Wood (Hughes, J., 1994, Notable records of ants (Hym.: Formicidae) in south-east Sutherland. *Ent. Rec.* **106**: 75-76), and those in Glen Affric to the south. This latest record suggests that colonies of *E. sanguinea* may be surviving in other fragments of ancient birchwoods in the Glens of East Inverness and East Ross.

*Myrmica sabuleti* Meinert, *M. lobicornis* Nylander, *Lasius flavus* (Fabr.) and *L. niger* (L.) agg. were all frequent amongst similar habitat along the valley bottom.

In addition, the woodlands along the first six miles of the Glen support a thriving population of *F. aquilonia* Yarrow which, with the woodland management initiatives developed by Scottish Natural Heritage, are set to fare well in the coming decades.— JONATHAN HUGHES, 11a Kings Street, Embo, Sutherland.

***Phyllonorycter strigulatella* (Zeller) (Lep.: Gracillariidae) mining *Alnus glutinosa* and extending range in Warwickshire**

Hitherto (*vide*, e.g., A.M. Emmet, *A Field Guide to the Smaller British Lepidoptera*, 1979), the only accepted British host for *P. strigulatella* has been the exotic *Alnus incana*. But in October 1991, Mr B.R. Mitchell sent me some mined leaves of native alder *A. glutinosa* that he had found at Grendon in north Warwickshire. In addition to three mines of *P. rajella* (L.) and a few of *P. stettinensis* (Nic.) there were 16 specimens of a type of *Phyllonorycter* mine quite unlike those of any of the known British miners of *A. glutinosa*. I concluded that they must belong to *P. strigulatella*, and this was confirmed when some imagines emerged (indoors) in March 1992. These were the first confirmed records for Warwickshire, though the presence of the moth in the county had previously been suspected (J. Robbins, 1992, *A Provisional Atlas of the Lepidoptera of Warwickshire*, Part 3, p. 55), and since then mines have been found during 1992-1995 at no less than nine other sites in the county, chiefly in *A. glutinosa* but also in *A. incana*. Some of these sites were well visited during the 1980s and the moth was unlikely to have been missed had it then been present. These findings suggest an extension of range coupled with adaptation to a new (and much commoner) host. The use of *A. glutinosa* is not restricted to Warwickshire since in July 1995 I found a few occupied mines near Wye in East Kent.

The veins in the leaves of *A. incana* lie fairly close together and the larvae of *P. strigulatella* form long neat mines that touch the veins on both sides for the whole length of the mine. In *A. glutinosa*, on the other hand, the mines appear quite different, being remarkably untidy for those of a *Phyllonorycter*. It would seem that the larvae try to base their mines on the veins, but in this host they are much wider apart, and the other edges of the mines are irregular in outline. A series of mines measured 15-20mm in length by 7-10mm in breadth, and are predominantly green above; only the smaller mines may exhibit the mottled appearance said to be characteristic of the species. The cocoons lie roughly centrally in the mines, with the frass distributed around the edges of the latter. Limited data suggest that in the autumn the species pupates roughly three weeks later than *P. rajella*.— JOHN ROBBINS, 123b Parkgate Road, Coventry CV6 4GF.